



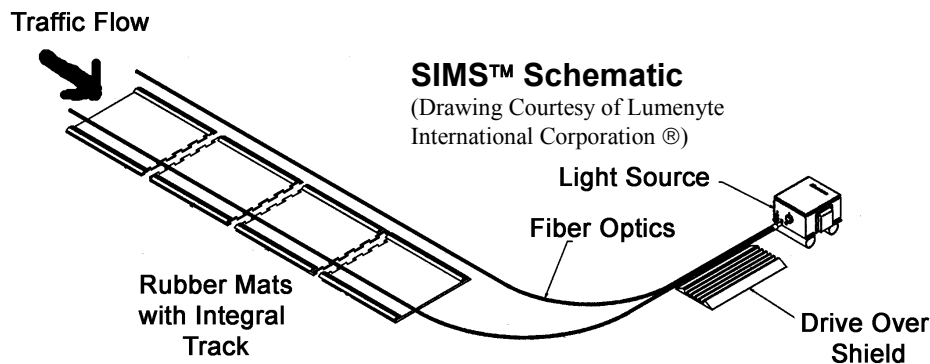
NFESC Technical Bulletin 05/02: **New Security Products for Vehicle Inspections**

International Corporation® have jointly developed three new security products for vehicle inspection. The Security Illumination Mat System (SIMS), IW-1000 PypeLyte® Inspection Wand and IW-2000 PypeLyte® Inspection Light provide security personnel with effective and low cost alternatives to complex & high cost systems.

Security Illumination Mat System (SIMS™)

Independent testing of under vehicle inspection equipment (camera systems vs. mirrors) shows the best method to inspect a vehicle underside for the presence of explosive devices is direct visual observation by security personnel using a pole-mounted mirror. Proper lighting is the key to effective under vehicle inspection. The lighting needed to perform under vehicle inspections poses some unique problems. High intensity area or spot lighting produces glare and deep shadows that can mask suspicious items. Flashlights, floodlights and daylight all share this problem.

The SIMS™ uses fiber-optic technology to produce a soft, uniform no-glare light devoid of obscuring shadows. The system is designed to be deployed anywhere and operate 24 hours a day in all weather conditions. Vehicles drive over the system, which illuminates the entire underside of a full size car or truck. Security personnel can effectively and rapidly scan the vehicle underside, improving throughput.



- Base system price, \$4700
- Uses a single light bulb good for 4000 hours of continuous operation
- Expected field life is 2 + years of continuous outdoor operation
- Can be deployed on any surface (pavement, dirt, grass, gravel)
- No site preparation required
- Will assist to increase vehicle throughput at check points
- Installs in 15 minutes
- No tools required
- Simple on/off operation requires no training of personnel
- Very low maintenance requirements
- Fuel, oil and solvent resistant
- Power requirements are 2 amps at 110VAC, 60HZ
- Easily stored for later deployment
- Replacement parts available



SIMS Illuminated Vehicle

Notice the differences between these photos:

- Shadows behind muffler & brake cable
- Spring perch in upper right corner
- Uniform light distribution & penetration
- Depth of lighting to bottom of floor pan



Flashlight Illuminated Vehicle



SIMS™ Illuminated

**Mirror viewed image of
parking brake bracket**



Flashlight Illuminated

**Mirror viewed image of
parking brake bracket**



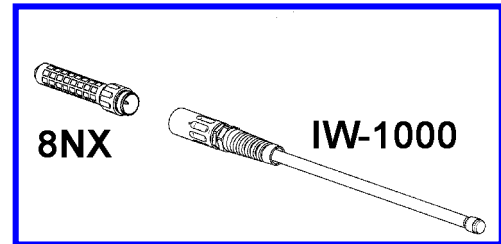
Ambient Light

**Mirror viewed image of
parking brake bracket**

IW-1000 PypeLyte® Inspection Wand

This product is designed to mount onto a SureFire® Model 8NX flashlight. It provides search personnel with a flexible 12" long wand of light. The light emits from the wand in a 360-degree pattern along its length. Security personnel can insert the wand into many hard to reach or confined areas and effectively light them. The IW-1000 is very useful for vehicle, aircraft, and small vessel inspections. The IW-1000 is fabricated from a single, large fiber optic element, is non-conductive, and safe to use around flammable materials. The IW-1000 is as convenient and easy to use as standard flashlight.

- Price: \$200, less flashlight
- Single unit construction, no parts to lose or replace
- No maintenance required
- Waterproof
- Fuel, oil, and solvent resistant
- Robust and virtually unbreakable
- Provides uniform area lighting
- Can be bent 180 degrees
- Returns to normal shape
- Can be used for inspections, traffic control, etc.



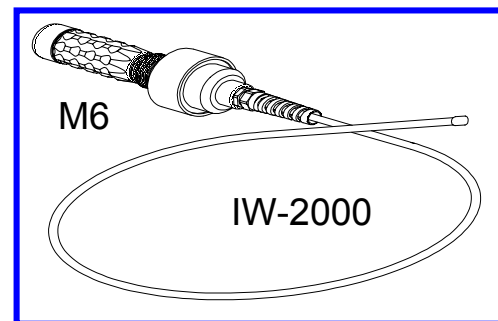
(Drawing Courtesy of Lumenyte International Corporation®)

IW-2000 PypeLyte® Inspection Light

This product is designed to be immersed into gasoline, fuels, and solvents. Initially intended to assist in fuel tank inspections, the product has a wide range of applications such as small vessel inspections, aircraft inspections, and machinery maintenance.

The fiber optic element is ¼" diameter by 2 meters long, and functions the same as the IW-1000, providing the same lighting effect. The IW-2000 mounts onto a SureFire® M6 flashlight, is easily man-portable, and safe to use around flammable materials.

- Price: \$350, less flashlight
- Replaceable fiber optic element
- Flexible yet stiff enough for insertion into tanks
- Easy maintenance and repair
- Waterproof
- Fuel, oil and solvent proof
- Lightweight and convenient
- Longer lengths available



(Drawing Courtesy of Lumenyte International Corporation®)



For more information on this and related products contact:
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